

From: Major James P. Etter

To: COL JOHN BOYD

Subj: Review of FMFM-5 Aviation--Content Outline

1. I need your assistance in reviewing the enclosed outline of FMFM-5 on aviation. I would ask that you take a few hours of your time to help getting this FMFM in focus with FMFM -1 and at the same quality level.

2. When you review this document please keep in mind the following areas:

- a. Is the focus correct? If not, If yes--then what else?
- b. What is left out? What is left in that should be left out?
- c. Use of history--what can you add?

Thankyou for your help. I need to receive your response by COB 27 March 1991. Please mail or guard mail your response to

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Sir,

I need a good reading of this. If you need to talk, you can call me at any time.

THanks,
Jim

INTRODUCTION

A. This book is about how to employ airpower: how to use air power within the framework of the MAGTF to help attain a decision.

- Not a book about how to fly airplanes or call for fire; those are techniques, they will be dealt with in other aviation manuals.
- Focus of book is how to think about air power.
- The basis of thinking is centered on combat history.
- How to think is basis for doctrine--not recipes or formulas.

B. Aviation doctrine is the same as ground force doctrine in basic concepts. Entire USMC--ground, air, and logistics--fights according to doctrine of maneuver warfare. This book applies maneuver doctrine to aviation.

- MAGTF concept/combined arms. Air as a combined arm fundamental to Marine Corps doctrine.
- Doctrine looks at using air power operationally as well as tactically.
- Purpose is to provide a "common sheet of music" off which ground and air can sing together harmoniously--each with a full doctrinal understanding of the other.

OUTLINE

CHAPTER I: VISIONS AND REALITIES

A. Evolution of Thinking on Air Power

1. Visions: chronology of thoughts, visions and claims on air power. Includes Giulio Douhet, Hugh Trenchard, Billy Mitchell, post-World War II, Vietnam.
2. Realities. How did these visions hold up to the test? Fell short. Strategic Bombing Survey, failure of "Massive Retaliation" policy, loss in Vietnam (Clodfelter, Tilford), Afghanistan--Persian Gulf?
3. Question: how can we build a vision of air power that accords with reality?

B. The Theory of War and Air Power

1. USMC now approaches the practice of war through the theory of war--as shown by FMFM-1.
2. The Theory of War is the same for ground warfare and air warfare. Review basic tenets:
 - a. dominated by fog and friction, uncertainty and rapid change
 - b. War is moral, mental, and physical.
 - c. War is fought simultaneously on three levels: strategic, operational, and tactical.
3. Lethality and Effectiveness
 - a. Destruction in combat is not an end in itself, but a means to a larger end--effectiveness. Effectiveness is defined in terms of results--

not input. Ultimately means winning.

b. No direct relationship--lethality alone (destruction) does not automatically mean winning.

4. Summary: theory of war espoused by USMC-- Maneuver Warfare seen through FMFM-1--with history of air power both show Douhet approach is wrong. You do not win simply by methodically bombarding the enemy from the air to cause attrition; that is attrition warfare.
5. What is the correct theoretical understanding of air power? To answer that question, let us look at cases where air power has been effective-- where it has made a decisive difference in winning.

c. Case studies in the effective use of air power

1. Air power is situational: failure of Operation strangle in Italy while Germans are static, success of follow-on air operations when ground action makes Germans move.
2. Catching enemy on the move: Linebacker I, Persian Gulf.
3. Operational use of air power: Normandy (delay) air transport in Burma (supply).
4. Using air power for a tactical decision: Guderian crossing the Meuse (was also an operational decision)
5. Strategic use of air power: Linebacker II. Note

it was for a limited objective. Cuban missile crisis: air reconnaissance.

6. Defensive air power: Battle of Britain. Cheng/chi (offense within defense); fighter defense combined with attack on Berlin that gets Hitler to switch his Schwerpunkt to London (mental aspect of war).

7. Offensive air power: Israelis in 1967. Moral aspect. (Gulf)

D. What theory emerges from these case studies? Subject of next chapter.

Chapter II: What Can Air Power Do?

A. Air power can have a decisive effect on the outcome of the total air-ground action--battle, campaign or conflict.

B. In terms of USMC theory of war, this means the central concept for employing aviation is that of focusing effort (Schwerpunkt).

1. Focus of effort is the MAGTF commander's bid to attain a decision.

2. Air in turn can make a decisive contribution to the bid to attain an overall air-ground decision by doing something potentially decisive that no other arm can do.

a. Relate to above examples, e.g., air can have a decisive effect by delaying intervention of enemy's operational reserves,

by giving CAS to ground Schwerpunkt that has insufficient organic fire support, by providing that ground Schwerpunkt with emergency supplies until ground logistics up, by providing key information with reconnaissance, ect.

3. Air can contribute a great ability to shift the Schwerpunkt -- operationally as well as tactically--because it can cover distance and do so fast.
4. Air may sometimes be the Schwerpunkt, e.g., if I maneuver on the ground so as to force a mechanized enemy to shift fast over a long distance, then hit him with air while he moves. The air, more than the ground force, may destroy him in that case. If not the Schwerpunkt itself, it should support the Schwerpunkt.
5. In order to be available to function as or in support of the Schwerpunkt, air should be used to do those things only it can do. If you are using it to do something that artillery or trucks or infantry or radio intercept can do as well, you are dispersing it, not focusing it. Focus exists in relation to mission as well as to time and place and itself (i.e., not penny-packeting it).

D. What air power cannot do.

1. Be decisive on its own, without reference to what is happening on the ground (winning through bombardment and attrition only).
2. Be decisive if it is asked to do something that has no potential for achieving a decision (as is true of ground forces also).
3. Be decisive if it is dispersed doing things other means can do as well.
4. Be decisive if it is pennypackted, a few planes here doing one thing, a few somewhere else doing another.
5. Used in way that are not in accord with the situation.

Chapter III: Waging War

A. Aviation and the campaign

As noted, aviation can make a difference at the operational as well as the tactical level. How can you integrate aviation into the campaign?

- B. Campaign planning -- (take from FMFM 1-1). Key: aviation commander(s) must be full participants in the planning. They must both help shape the plan so it accurately reflects the operational capabilities, limitations and requirements of aviation and they must have a full understanding of the whole campaign in order to command the aviation effectively.

NOTE: Give example --historical or hypothetical.

- C. Conducting the campaign -- (take from FMFM 1-1)
 - a. Continued need for full participation by the air commander(s), as adjustments in the campaign plan must be made.
 - b. Importance of air in operational emergencies -- e.g., possible operational surprise (air recon), enemy operational breakthrough (switching the Schwerpunkt fastest with air), encirclement of friendly forces (emergency air resupply).
 - c. Importance of air in operational breakthrough -- e.g., replacing artillery lead forces who have outrun (CAS), delaying enemy movement of operational reserves to block friendly breakthrough (armed recon), destroying from air enemy forces that must move in response to our actions (Persian Gulf -- armed recon).
 - d. Creating preconditions for successful campaign: counter air, air defense, and air reconnaissance.
 - e. Concluding campaign successfully -- psychological effect on enemy leadership of our air superiority, interdiction to buy time for pause as we transition from one campaign to another, disruption of enemy infrastructure to prevent his recovery from our operational victory, prevent him from continuing war.
 - f. Conclusion -- because the operational level is more important than the tactical, the operational use of air power is more important than its tactical

use. Using air power effectively at the operational level requires aviation commanders who understand the operational employment of their arm and full integration of those commanders in the planning and conducting of the campaign. To that end, the operational air commander -- normally the senior aviator in the theater -- should normally be co-located with the overall theater commander.

D. The Tactical Use of Airpower

a. Like all things tactical, depends on the situation. Use will be different between, for example, mechanized warfare in open terrain and low intensity conflict in jungle. Key is always to adapt air power to the situation, rather than thinking "this is what aircraft do" and just doing that regardless of the situation.

NOTE: Beware of "six functions of Marine Air" -- can easily become a standard for all situations. More useful "What results do we need from aviation in this situation?"

b. Always keep in mind concept of using air to do something decisive that nothing else can do.

c. Use of mission orders -- from MAGTF commander to aviation, and within aviation all the way down to the individual pilot. Tell desired result through commander's intent and mission, leave freedom as to how to get the result.

d. Focusing effort -- at all times and levels.

- e. Speed -- especially in responding to changes in the situation.
- f. Keeping aviation in reserve when there is no opportunity for it to do something decisive nothing else can do. At tactical level, this reserve may be airborne (loitering) or on ground.
- g. Always keeping aviation commander and ground commander in full and frequent communication so they can "sing of the same sheet of music."

Conclusion -- while techniques of employing an F-18 and employing an infantry company vary greatly, the tactical concepts that guide them are the same. Maneuver warfare applies to both.

E. Air Command & Control

- a. Key to implementing maneuver warfare for aviation is permitting aviators at all levels to get the needed results, to focus their effort, to respond quickly, etc. is a correct approach to command and control.
- b. Starting point must be keeping aviators always fully involved in what is happening in total battle-- ground as well as air. Requires co-location of air and ground commanders, so they communicate informally and constantly. Must work off same map, same intel report and situation report, ect. In planning, air and ground commanders and staff must meet and do the planning together, not just "inform" one or the other after the fact. Full integration of aviation and ground

can only come with full integration of aviators and ground -- of the people.

c. Also need frequent lateral communication between those executing in air and on ground. If a helo or Harrier, set down and talk with the folks on the ground whose effort you are supporting. If in air, talk to them on radio. In peacetime, go spend time with their units, get to know the people involved. Personal ties are of fundamental importance to effective communication.

d. With frequent talking and getting to know your opposite number, more communication can become implicit rather than explicit. (Discuss)

e. Control -- loose and close -- direct and indirect. This relates to implicit and explicit but put in practical terms. Provide useful info, but focus on aviator deciding how to use his aircraft to get intended result.

f. Current control measures -- 9 line briefs, ect. -- should not be regarded as mandatory. They may be used when situation makes them useful, but should not be a straitjacket. In some or even many situations, may hurt more than help.

g. Central commander does need to make sure effort is focused and that focus shifts when it needs to. Also decides when and where to commit reserve, provides intent for aviation (derived from intent for MAGTF)

mission etc. Again, just like ground commander in maneuver warfare.

Chapter IV: Conclusion

- A. As in ground warfare, the starting point for success in employing air power is understanding the concepts and the history that lies behind them.
- B. Conceptual reference point is identical for air and ground: basic concepts of maneuver warfare.
- C. Concepts for operational and tactical use of air power also closely related if not identical. Key to both is full integration of the people and the planning, so there is one campaign and one battle, not separate air and ground campaigns or battles.
- D. These concepts are a starting point; imagination and creativity is required to apply them to specific situations. Each situation will be different, in terms of how air power is used -- the things it is asked to accomplish. But all situations will be united in that in all, the goal is to use air power to do something decisive that nothing else can do.